

RESOLUTION NO. 14-064

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF VICTORVILLE ADOPTING TARGETS FOR VICTORVILLE MUNICIPAL UTILITY SERVICES TO PROCURE COST-EFFECTIVE ENERGY STORAGE SYSTEMS

WHEREAS, State Assembly Bill 2514 (Chapter 469, Statutes of 2010) (“AB 2514”) added sections 2835 and 2836 to the Public Utilities Code regarding energy storage systems; and

WHEREAS, Section 2836 (b) (1) of the Public Utilities Code requires the governing board of each local publicly owned electric utility (“POU”) to initiate a process to determine appropriate targets, if any, for the POU to procure viable and cost-effective energy storage systems to be achieved by December 31, 2016, and December 31, 2020; and

WHEREAS, Section 2836 (b) (2) of the Public Utilities Code requires the governing board of each POU to adopt energy storage procurement targets, if determined to be appropriate, by October 1, 2014; and

WHEREAS, Section 2836 (b) (3) of the Public Utilities Code requires the governing board of each POU to reevaluate energy storage targets not less than once every three years; and

WHEREAS, Section 2836 (b) (4) of the Public Utilities Code requires each POU to report to the California Energy Commission the energy storage system procurement targets, if any, adopted by the POU’s governing board, along with any modifications made to such targets as a result of reevaluation; and

WHEREAS, the City of Victorville (“City”) operates a municipal electric utility known as Victorville Municipal Utility Services (“VMUS”), and VMUS is generally subject to the legislative and regulatory requirements applicable to POU’s; and

WHEREAS, the City Council serves as the governing board of VMUS; and

WHEREAS, to conform to Public Utilities Code sections 2836 (b) (1) and 2836.6, staff evaluated the viability and cost-effectiveness of applicable energy storage technologies to serve VMUS customers based on costs, load forecasts, potential on-site customer generation and market alternatives; and

WHEREAS, based on that evaluation, staff found that the application of utility-owned and operated energy storage technology to serve VMUS customers over the next three years is more costly than the value of benefits; and

WHEREAS, it is anticipated that with the passage of time and improved technology energy storage systems will become cost-competitive with other resources; and

WHEREAS, to capture market opportunities, it is recommended that VMUS establish energy storage targets for cost-effective applications equal to one percent (1%) of VMUS' peak load during calendar years 2015 and 2020, with installations occurring no later than the end of calendar years 2016 and 2021, respectively; and

WHEREAS, the City Council will reevaluate energy storage targets not less than once every three years; however, in the event a cost-effective applicable energy storage application is not identified, the appropriateness of these targets will be reevaluated by June 2016 and 2021, respectively, and any resulting modifications to the targets will be reported to the California Energy Commission; and

WHEREAS, the City Council has reviewed staff's evaluation and recommendation and determined that a target to procure cost-effective energy storage systems is appropriate.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF VICTORVILLE DOES HEREBY RESOLVE, DETERMINE AND ORDER AS FOLLOWS:

Section 1. The recitals and findings set forth above are true and correct and are hereby incorporated in their entirety by this reference.

Section 2. To satisfy the obligations of VMUS pursuant to AB 2514, the City Council determines that establishing energy storage targets for cost-effective applications equal to one percent (1%) of VMUS' peak load during calendar years 2015 and 2020, with installations occurring no later than the end of calendar years 2016 and 2021, respectively, is appropriate.

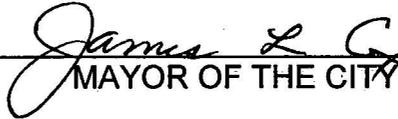
Section 3. The City Council will reevaluate energy storage targets not less than once every three years; however, if a cost-effective applicable energy storage application is not identified, the appropriateness of these targets will be reevaluated by June 2016 and 2021, respectively, and any resulting modifications to the targets will be reported to the California Energy Commission.

Section 4. This Resolution shall take effect immediately upon its adoption.

Section 5. The City Clerk shall certify to the adoption of this Resolution.

Resolution No. 14-064

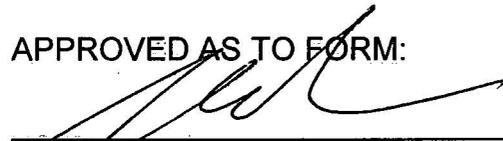
PASSED, APPROVED AND ADOPTED this 16th day of SEPTEMBER 2014.


MAYOR OF THE CITY OF VICTORVILLE

ATTEST:


CITY CLERK

APPROVED AS TO FORM:


CITY ATTORNEY

I, CAROLEE BATES, City Clerk of the City of Victorville and ex-officio Clerk to the City Council of said City, DO HEREBY CERTIFY that the foregoing is a true and correct copy of Resolution No. 14-064 which was adopted at a meeting held on the 16th day of September 2014, by the following roll call vote, to wit:

AYES: Councilmembers Cox, Garcia, Kennedy, McEachron and Valles

NOES: NONE

ABSENT: NONE

ABSTAIN: NONE


CITY CLERK



City of Victorville

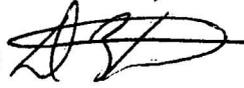
14343 Civic Drive
P.O. Box 5001
Victorville, California 92392-5001

PHONE 760.955.5000
FAX 760.955.5199
vville@ci.victorville.ca.us
http://ci.victorville.ca.us

AGENDA ITEM

WRITTEN COMMUNICATION

CITY COUNCIL MEETING OF: September 16, 2014

SUBMITTED BY: Douglas B. Robertson  DATE: September 3, 2014
City Manager

ATTACHED: Resolution 14-064

SUBJECT: RESOLUTION 14-064 ENTITLED, "A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF VICTORVILLE ADOPTING TARGETS FOR VICTORVILLE MUNICIPAL UTILITY SERVICES TO PROCURE COST-EFFECTIVE ENERGY STORAGE SYSTEMS"

RECOMMENDATION: That the Honorable City Council adopt Resolution 14-064, establishing energy storage targets for Victorville Municipal Utility Services (VMUS) in accordance with the requirements of the state of California's energy storage law under Assembly Bill 2514 (AB 2514).

<u>FISCAL IMPACT:</u>	N/A
PROJECT BUDGET	\$ -
PROJECT COST	- \$ -
PROJECT BALANCE	\$ -
BUDGET ACCT NO.:	N/A

<p>--Finance Use Only--</p> <p>Additional Expense:</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes/\$Amount:</p> <p>Additional Revenue:</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes/\$Amount:</p> <p>CFO Review</p> <p>_____</p>

DISCUSSION: AB 2514 requires the governing board of each publicly-owned utility (POU) to "determine appropriate targets, if any, for the utility to procure viable and cost-effective storage systems to be achieved by December 31, 2016, and December 31, 2021". As the governing board for VMUS, the City Council must adopt any appropriate energy storage targets by October 1, 2014, and reevaluate its determination for an energy storage procurement target not less than once every three years. VMUS is then required to provide the California Energy Commission (CEC) with adopted energy storage procurement targets, along with any subsequent modifications made to such targets as a result of reevaluation. By January 1, 2017, and January 1, 2022, VMUS must also report to the CEC on the progress toward meeting the established targets.

AB 2514 also required that the California Public Utilities Commission (CPUC) determine appropriate targets for entities under its jurisdiction to procure viable and cost-effective energy storage systems. In October 2013, the CPUC established an energy storage target of 1,325 megawatts for investor owned utilities (IOUs) by calendar year 2020, with installations required no later than the end of calendar year 2024, where megawatts represents the peak capacity of the storage resource in terms of the maximum discharge rate. The CPUC also established a target for Community Choice Aggregators and Electric Service Providers to procure energy storage equal to one percent (1%) of their annual peak loads in calendar year 2020, with installations occurring no later than calendar year 2024, consistent with the IOU requirements.

As defined by AB 2514, an energy storage system must absorb energy, store it for a period of time, and then dispatch the stored energy. Energy storage procurement also includes the use of energy storage devices that are owned by customers or other third parties. An energy storage system must be cost effective and either: 1) reduce emissions of greenhouse gases; 2) reduce demand for peak electrical generation; 3) defer or substitute for an investment in generation, transmission, or distribution assets; or 4) improve the operation of the electrical transmission or distribution grid. The performance and location of an energy storage system determine the services it can provide. An energy storage system is rated according to both how much power it can absorb and supply (kilowatt or kW), and the duration for which it can supply its rated power (kilowatt-hour, or kWh). Other performance characteristics include the energy loss between charging and discharging, time required to reach the desired power level and the number of charge/discharge cycles before replacement is required.

The cost of energy storage typically includes a power (kW) component associated with the power conversion element of the system, and an energy (kWh) component associated with the energy storage element of the system. Rechargeable batteries are the most commonly known energy storage technology. The estimated cost of a lead-acid rechargeable battery is \$400/kW plus \$330/kWh, with an estimated energy loss of 25 percent between charging and discharging. The current expenditure for a typical energy storage battery equal to one percent (1%) of the VMUS load is \$56,700. VMUS' review of existing energy storage technologies did not identify an application that would be cost-effective at this time; however, it is anticipated that energy storage systems will become more commercially tested and cost-competitive with other resources with the passage of time and improvements in technology.

In order to capture potential market opportunities, it is recommended that the City Council adopt Resolution 14-064 to establish targets for VMUS to procure cost-effective energy storage applications equal to one percent (1%) of its peak load during calendar years 2015 and 2020, with installations occurring no later than the end of calendar years 2016 and 2021, respectively. The City Council will reevaluate these energy storage targets not less than once every three years; however, in the event a cost-effective applicable energy storage application is not identified, the appropriateness of these targets will be reevaluated by June 2016 and 2021, respectively, and any resulting modifications to the targets will be reported to the CEC.

Submitted by: DBR/jd